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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/827,127	04/05/2001	Chaojun Deng	43774/209425	4908

20350 7590 10/18/2006

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EXAMINER

MURPHY, RHONDA L

ART UNIT	PAPER NUMBER
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2616

DATE MAILED: 10/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/827,127

Applicant(s)

DENG, CHAOJUN

Examiner

Rhonda Murphy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 43-68 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 43-68 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 7/10/06.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This communication is responsive to the amendment filed on 7/10/06. Accordingly, claims 1-19 were previously canceled, claims 20-42 have been canceled, claims 42-68 have been added and claims 43-68 are currently pending in this application.

Claim Objections

1. Claims 43 - 45, 57, 60 – 62, 64 – 67, objected to because of the following informalities:

Claim 43, lines 7-8 and lines 14-15 are redundant limitations.

Claim 44, line 2, the term “configured to” makes the limitation following the term optional and does not require the step to be performed. Refer to MPEP 2111.04 and 2106 C.

Claim 45, line 2, the term “configured” makes the limitation following the term optional and does not require the step to be performed. Refer to MPEP 2111.04 and 2106 C.

Claim 45, line 2, the phrase “without through a circuit card” shall be rephrased.

Claim 57, lines 5 and 13, the term “configured to” makes the limitation following the term optional and does not require the step to be performed. Refer to MPEP 2111.04 and 2106 C.

Claim 60, line 5, “second” shall be replaced with “third”.

Claim 61, line 2, “the process at least information” shall be rephrased.

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Claim 61, line 2, "perform" shall be replaced with "performing".

Claim 62, line 2, "the process at least information" shall be rephrased.

Claim 62, line 2, "perform" shall be replaced with "performing".

Claim 64, line 12, the term "configured to" makes the limitation following the term optional and does not require the step to be performed. Refer to MPEP 2111.04 and 2106 C.

Claim 65, line 2, the phrase "without through a circuit card" shall be rephrased.

Claim 65, line 2, the term "configured" makes the limitation following the term optional and does not require the step to be performed. Refer to MPEP 2111.04 and 2106 C.

Claim 66, line 2, "the process at least information" shall be rephrased.

Claim 66, line 2, "perform" shall be replaced with "performing".

Claim 67, line 2, "the process at least information" shall be rephrased.

Claim 67, line 2, "perform" shall be replaced with "performing".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

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only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 43 – 49, 51 – 68 are rejected under 35 U.S.C. 102(e) as being anticipated by Kastenholz et al. (US 2006/0007946).

Regarding claim 43, Kastenholz teaches a system for data communication, the system comprising: a first circuit card (Figs. 2 and 3; line card module 102); a first transfer card (Fig. 3; local line card 202) coupled to the first circuit card (see Fig. 3; page 5, paragraph 50); a second circuit card (Figs. 2 and 5; expanded interconnect board 138); a second transfer card (Fig. 5; ASIC 410a/b) coupled to the second circuit card (see Fig. 5); a first switched network card (Figs. 2, 3 and 5; local interconnect module 118); a first interface card (Fig. 3, interconnect board 218) coupled to the first switched network card (see Fig. 3; page 5, paragraph 51); a second interface card (Fig. 3, interconnect board 220) coupled to the first switched network card (see Fig. 3; page 5, paragraph 51); a first data communication link (Fig. 3, communication lines 217) connecting the first transfer card and the first interface card (page 5, paragraph 50); a second data communication link (Fig. 5; communication lines between 220 and 138) connecting the second transfer card and the second interface card (see Fig. 5); wherein: the first switched network card is coupled to the first interface card and the second interface card (see Fig. 3); the first switched network card (118) and the first circuit card (102) are different types of cards (page 5, paragraphs 50-51; 102 is a line card and 118 is a module divided into planes, containing an ASIC). (Note: the circuit cards and switched network card do not define a function or structure to distinguish the cards from one another).

Regarding claim 44, Kastenholz teaches the first switched network card configured to perform an exchange function between the first circuit card and the second circuit card (Fig. 2; via communication lines between 102, 118 and 138).

Regarding claim 45, Kastenholz teaches the first switched network card further configured to not receive any data signal without going through a circuit card (see Fig. 2; all communication to the first switched network (interconnect module 118) goes through the circuit cards (line card module 102 and expanded interconnect board 138)).

Regarding claim 46, Kastenholz teaches the first transfer card coupled to the first circuit card through at least a first backplane (Fig. 3; page 5, paragraph 50; line card module 102 includes line card 202 which are printed circuit boards); the second transfer card coupled to the second circuit card through at least a second backplane (Fig 5; page 8, paragraph 74; interconnect module 138 connects ASIC 410); the first backplane and the second backplane are associated with different physical locations (Fig. 2; page 8, paragraph 70; chassis 101 and 105).

Regarding claim 47, Kastenholz teaches the first transfer card, the first circuit card, and the first backplane are associated with a first framework (Fig 2; page 8, paragraph 70; chassis 101); the second transfer card, the second circuit card, and the second backplane are associated with a second framework (Fig 2; page 8, paragraph 70; chassis 105); the first framework and the second framework are associated with different physical locations (Fig. 2; page 8, paragraph 70; chassis 101 and 105).

Regarding claim 48, Kastenholz teaches the first transfer card coupled to the first circuit card through at least a first backplane (Fig. 3; page 5, paragraph 50; line card

module 102 includes line card 202 which are printed circuit boards); the first interface card coupled to the first switched network card through at least a second backplane (Fig. 3; page 5, paragraph 51); the first backplane and the second backplane are associated with different physical locations (Fig. 2; page 8, paragraph 70; chassis 101 and 103).

Regarding claim 49, Kastenholz teaches the first transfer card, the first circuit card, and the first backplane are associated with a first framework (Fig 2; page 8, paragraph 70; chassis 101); the first interface card, the first switched network card, and the second backplane are associated with a second framework (Figs 2 and 3; page 8, paragraph 70; chassis 103); the first framework and the second framework are associated with different physical locations (Fig. 2; page 8, paragraph 70; chassis 101 and 103).

Regarding claim 51, Kastenholz teaches each of the first data communication link and the second data communication link includes an optical fiber (page 5, paragraph 50: SONET I/O ports; page 8, paragraph 73: Gigabit Ethernet interfaces, inherently include optical fibers).

Regarding claim 52, Kastenholz teaches the first transfer card coupled to the first circuit card through a base card (Fig. 3; page 5, paragraph 50; printed circuit board) and a backplane (Fig. 3; page 5, paragraph 50); the base card is coupled directly to both the first transfer card and the backplane (Fig. 3; page 5, paragraph 50).

Regarding claim 53, Kastenholz teaches the first interface card coupled to the first switched network card through a base card and a backplane (Fig. 3, page 5, paragraph

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50; printed circuit board); the base card coupled directly to both the first interface card and the backplane (Fig. 3, page 5, paragraph 50; printed circuit board).

Regarding claim 54, Kastenholz teaches the first transfer card and the second transfer card are different (Figs. 3 and 5; page 5, paragraph 50: local line card 202; page 8, paragraph 74: ASIC 410).

Regarding claim 55, Kastenholz teaches the first interface card and the second interface card are different (Fig 3; page 5, paragraph 51: interconnect board 218 and 220).

Regarding claim 56, Kastenholz teaches the first data communication link and the second data communication link are different (Fig. 3, communication lines 217 and Fig. 5; communication lines between 220 and 138).

Regarding claim 57, Kastenholz teaches a first circuit card coupled to a first backplane (Fig. 3; page 5, paragraph 50); a second circuit card coupled to a second backplane (Fig 5; page 8, paragraph 74); a switched network card (Fig. 2; 118) coupled to the first circuit card (102) and the second circuit card (138), the switched network card being configured to: receive a first signal from the first circuit card (via communication line 142); receive a second signal from the second circuit card (via communication lines 170); process at least information associated with the first signal and the second signal (the switched network card, shown in greater detail in Fig 3, processes data through the interface cards); wherein: the first backplane and the second backplane are associated with different physical locations (Fig. 2; page 8, paragraph 70; chassis 101 and 105); the switched network card is further configured not to receive any data signal that is not

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sent from or through a circuit card (see Fig. 2; all communication to the first switched network (interconnect module 118) goes through the circuit cards (line card module 102 and expanded interconnect board 138).

Regarding claim 58, Kastenholz teaches the same limitation described in the rejection of claim 47.

Regarding claim 59, Kastenholz teaches the switched network card coupled to a third backplane (page 5, paragraph 51; via printed circuit boards); the third backplane and the first backplane are associated with different physical locations (different chassis 103 and 101); the third backplane and the second backplane are associated with different physical locations (different chassis 103 and 105).

Regarding claim 60, Kastenholz teaches the first circuit card and the first backplane are associated with a first framework (Fig. 2; chassis 101); the second circuit card and the second backplane are associated with a second framework (chassis 105); the switched network card and the third backplane are associated with a third framework (chassis 103); the third framework and the first framework are associated with different physical locations (see Fig. 2; page 8, paragraph 70); the third framework and the second framework are associated with different physical locations (see Fig. 2); the first framework and the second framework are associated with different physical locations (see Fig. 2).

Regarding claim 61, Kastenholz teaches processing at least information associated with the first signal and the second signal comprises performing at least one logic function (Fig. 3, via switched network card 118 and an ASIC).

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Regarding claim 62, Kastenholz teaches processing at least information associated with the first signal and the second signal comprises performing at least one exchange function (Fig. 2; via communication lines between 102, 118 and 138).

Regarding claim 63, Kastenholz teaches the circuit card and the switched network card are different types of cards (page 5, paragraphs 50-51; 102 is a line card and 118 is a module divided into planes, containing an ASIC).

Regarding claim 64, Kastenholz teaches providing a first framework (Fig. 2; chassis 101) associated with a first circuit card (102) and a first transfer card (Fig. 3, 202), the first transfer card being coupled to the first circuit card (see Fig. 3); providing a second framework (Fig. 2, chassis 105) associated with a second circuit card (Fig. 5, 138) and a second transfer card (Fig. 5, 410), the second transfer card being coupled to the second circuit card (see Fig. 5); providing a third framework (Fig. 2, chassis 103) associated with a switched network card (118) and a first interface card (Fig. 5, 218) and a second interface card (220), the first interface card being coupled to the switched network card (see Fig. 3), the second interface card being coupled to the switched network card (see Fig. 3); connecting the first transfer card and the first interface card (Fig. 3; via communication lines between 202 and 218); connecting the second transfer card and the second interface card (Fig. 5; via communication lines between 220 and 410); wherein the switched network card is configured to: receive a first signal from the first circuit card (via communication line 142); receive a second signal from the second circuit card (via communication lines 170); process at least information associated with

the first signal and the second signal (the switched network card, shown in greater detail in Fig 3, processes data through the interface cards).

Regarding claim 65, Kastenholz teaches the same limitation described above in the rejection of claim 45.

Regarding claim 66, Kastenholz teaches the same limitation described above in the rejection of claim 61.

Regarding claim 67, Kastenholz teaches the same limitation described above in the rejection of claim 62.

Regarding claim 68, Kastenholz teaches the same limitation described above in the rejection of claim 63.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kastenholz et al. (US 2006/0007946) in view of Gorshe et al. (US 6,667,973).

Regarding claim 50, Kastenholz teaches a switched network card coupled to both the first interface card and the second interface card, but fails to disclose a second switched network card coupled to both the first interface card and the second interface card.

However, Gorshe teaches a second switched network card (Figs. 1b and 4b, HSU located in main shelf 102) coupled to both the first interface card (Fig. 4b, AMU in shelf 404) and the second interface card (AMU in shelf 406).

In view of this, it would have been obvious to one skilled in the art to modify Kastenholz's system by including a second switched network card, in order to provide a back-up switched network card for interconnecting the interface cards.

Response to Arguments

6. Applicant's arguments with respect to claims 43, 57 and 64 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

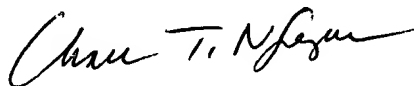
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rhonda Murphy whose telephone number is (571) 272-3185. The examiner can normally be reached on Monday - Friday 8:00 - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Rhonda Murphy
Examiner
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RM


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